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ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 1232-4252 K TAMURA 03/12/96 08/614,196 **EXAMINER** LM02/0912 ONUAKU, C MORGAN & FINNEGAN 345 PARK AVENUE ART UNIT PAPER NUMBER NEW YORK NY 10154 2715

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No. 08/614,196

Applicam(s)

Tamura et al

Examiner

Christopher Onuaku

Group Art Unit 2715



X Responsive to communication(s) filed on <u>Jun 27, 2000</u>	
This action is FINAL.	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay/835 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expire3 month(s), or longer, from the mailing date of this communication. Failure to respond within the period for responsible application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under 37 CFR 1.136(a).	onse will cause the
Disposition of Claim	
Of the above, claim(s) is/are	e withdrawn from consideration
Claim(s)	,
⊠ Claim(s) <u>1-16</u>	
Claim(s)	
☐ Claims are subject to res	
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on	
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152 SEE OFFICE ACTION ON THE FOLLOWING PAGES	,

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 6/27/00 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/614,196 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Arguments

2. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mimura et al (US 5,280,359).

Regarding claim 1, Mimura et al disclose an image pickup device for use in a television camera including a diaphragm control optimizing the light amount for a subject, comprising:

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- a) zone selecting means for selecting any zone on the image sensing plane in a state that said the image sensing means is sensing the subject image (see photographic area selecting switch 10; col.2, line 35 to col.3, line 28);
- b) exposure detecting means for detecting an exposure condition on the basis of the image signal in a selected zone, and exposure control means for controlling an exposure based upon the detected exposure condition (see the microcomputer 11; col.2, line 55 to col.3, line 20);
- c) memory means for storing control parameters outputted by the exposure control means, the memory means configured to store control parameters when an exposure control processing by the exposure control means is completed and an optimum exposure control state is obtained (again see microcomputer 11, and signal processing section 5 wherein the microcomputer excludes the masked blocks and controls the lens 2 on the basis of the signal for the remaining blocks to obtain optimum amount of light on the remaining photometric areas; col.2, line 55 to col.3, line 28), here the microcomputer 11 uses the "stored" optimum exposure parameters (inherently stored by the microcomputer 11) to adjust for an optimum amount of light of the remaining photometric area, some of which may be backlighted;
- d) control means for controlling the exposure control means to fix an exposure control state, i.e. optimum exposure state, by using the control parameters stored in the memory means (see microcomputer 11, and the discussions above).

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Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al in view of Munson (US 5,648,814).

Regarding claim 2, Mimura fails to explicitly disclose wherein if the value relating to exposure is outside a prescribes range of values stored in advance, the exposure maintaining means selects an upper-limit value or a lower-limit value of the prescribed range of values as a value relating to exposure. Munson teaches in Fig. 1-4 method and apparatus of a camera function of a video conferencing system enhanced such that it will operate in an automatic adjustment mode for brightness and color for only a predetermined period of time comprising microcontroller 32 which operates camera 16 in its initial period in the automatic adjustment mode. During this period, as part of the normal operation, microcontroller 32 continuously checks and determines if the image quality is "the same" as the "ideal image". If the image quality is "the same" as the "ideal image", microcontroller 32 continues operation without making any adjustments.

Otherwise, microcontroller 32 adjusts brightness and color balance as appropriate. Being able to adjust the exposure value of an object to fall within a predetermined optimum range of values, for example, ideal values, helps to simply the exposure control function in a camera. It would have

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been obvious to one of ordinary skill in the art to modify Mimura, as taught by Munson, to include a means to facilitate adjusting the exposure value of an object to fall within a predetermined optimum range of values, for example, ideal values, which helps to simply the exposure control function in a camera.

7. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al in view of Iwasaki (US 5,461,452).

Regarding claim 3, the claimed limitations of claim 3 are accommodated in the discussion of claim 1, except the claimed selected-zone detection means. Iwasaki in Fig.28&30 shows a visual axis detecting device 110 (col.18, lines 55-67) which detects the visual axis of the photographer, and a tracking device 155 (col.18, lines 64-67, and col.19, line 1 to col.21, line 6), and has approximate spectral characteristics. By adding the selected-zone detecting means feature to a camera, the photographer is better able to produce a better quality picture because of improved exposure. It would have been obvious to one of ordinary skill in the art to modify the camera of Mimura, as taught by Iwasaki, to include a selected-zone detecting feature to improve the exposure control capability of the camera, thereby creating a better quality camera.

Regarding claim 4, the claimed limitations of claim 4 are accommodated in the discussion of claim 2 above.

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Regarding claim 5, neither Mimura nor Iwasaki explicitly discloses the claimed selecting means for allowing a photographer to select whether maintenance of exposure is to be nullified. However, as disclosed by Iwasaki and discussed in claim 3 above, the detecting processing portion 115 detects the position of visual axis of the photographer. That is, the detecting processing portion is detecting what the photographer is seeing. It is then obvious that if the photographer considers the image he is seeing to be of poor quality, he can conveniently shift his line of sight to the spot where he can see an image which he considers to be of better quality. This way he has the ability to nullify or not the position of the image that the detecting processing portion 115 detects.

8. Claims 6,7&8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Iwasaki and further in view of Shimuzu (US 5,400,074).

Regarding claim 6, Mimura, as modified by Iwasaki, further teaches in Fig. 1, an exposing apparatus and method for performing optimum exposure control in correspondence to a luminance level of an object comprising:

- a) the claimed zone selecting means which is discussed in claim 1;
- b) the claimed exposure detecting means which is also discussed in claim 1;
- c) the claimed exposure control means which is discussed in claim 1;
- d) the "first" claimed memory means, which again is also. discussed in claim 1;

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e) the claimed "second" memory means for storing a video signal of the zone is disclosed by Iwasaki in Fig. 45 and column 3 0, lines 5 7-67 and column 3 1, lines 1-6. Here Iwasaki shows that the reading circuit 192 reads the outputs from the element indicated by the coordinates (Xa, Ya) from the CCD 107 according to the decision result indicating that the object is changed. The transferring circuit 193 transfers the above-named coordinates (Xa, Ya), and the outputs from the element obtained by the reading circuit 192 as coordinates (Xb, Yb) indicating the position of new object, and these data are stored in the coordinates holding portion 156. Thereafter, the tracking device 155 executes tracking processing of the position of the object on the basis of the above-mentioned position of the new object.

Neither Mimura nor Iwasaki shows the claimed detection means for determining whether a zoomed image signal captured by the image sensing means contains the video signal of the zone stored in the "second" memory means, and outputting a signal for resetting the control parameters in the "first" memory means if the captured image signal is not contained in the zone.

However, Shimuzu teaches in Fig. 5,6&7, col.4, line 62 to col.5, line 32, a video camera device comprising a zoom lens position detecting circuit 15. This zoom lens position detecting circuit detects the amount of movement of the zoom lens in the inner focus lens assembly 1, and the detected amount is supplied to the ROM 16. The ROM 16 stores amounts of F-drop corresponding to various positions of the zoom lens, as shown in Fig. 6. An amount of F-drop corresponding to the position of the zoom lens is supplied from ROM 16 to the control amount computing circuit 12 which calculates the open amount for the iris 2, and a gain for the AGC

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amplifier 4, on the basis of outputs from the loop filter I I and the ROM 16. Thereafter, the output from the control amount computing circuit 12 is sent to the iris driving circuit 13 and the D/A converter 14. The output from the iris driving circuit 13 is then sent to the iris 2 to control the open amount thereof. Fig. 7 shows a graph where the gain B of the AGC amplifier 4 is corrected to the gain curve B' by adding a gain amount 'W' corresponding to the amount of F-drop. This gain correction process shows that the zoomed video signal captured by the image sensor is reset and then corrected if the zoomed video signal is not contained.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the camera of Mimura, to include a zoomed video signal detecting means, as taught by Shimuzu, as an added feature to increase the versatility of the camera.

Claim 7 is rejected for the same reasons given with respect to claim 4 discussed above.

Claim 8 is rejected for the same reasons given with respect to claim 5 discussed above.

9. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Iwasaki and further in view of Faltermeier (US 5,579,156).

Regarding claims 9, 10 &12, the claimed limitations of claim 9 are accommodated in the

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discussions of claim 1 above, except for the claimed pointing device. Mimura discloses display means (see display circuit 6; and col.2, line 29 to col.4, line 4.. Mimura and Iwasaki fail to disclose the claimed pointing, device, for selecting any zone in a screen displayed by the display means. Faltermeier et al disclose in Fig.1 a photomicroscope with a video camera and an exposure time control for a still camera comprising the claimed display means (see monitor 25) for displaying the image area recorded with the camera, and the claimed pointing device (see the track ball 27c; col.4) which is used to select the object areas of particular interest, for exposure metering which ensures that these object areas are suitably exposed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mimura by realizing Mimura a pointing device, as taught by Faltermeier, for selecting object area of particular interest

Regarding claim 11, Faltermeier teaches, as discussed in claim 9 above, a track ball as a pointing device. It is well known in the art that the track ball and the mouse are both used as pointing devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the camera of Mimura realizing the apparatus of Mimura with a mouse as a pointing device in order to increase the versatility of Mimura, thereby making the apparatus more commercially appealing.

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Regarding claim 13, Iwasaki discloses the adjusting means adjusts exposure of the image sensing device by adjusting f-stop(focusing), shutter(exposure), and gain(see Fig.28; col.21).

Regarding claim 14, the claimed limitation wherein when adjustment by the adjusting means has attained a prescribed state, the control means maintains the state of adjustment prevailing at this time is accommodated in the discussions of claim I above.

Regarding claim 15, in Fig. 1, and column 4, lines 50-53, Faltermeier teaches the claimed selecting means for allowing the photographer to select whether storage of the adjusting data by the control means is performed or not is met by the disclosure that via switching knobs 27b (adjusting means, see claim 1), the user, which is the photographer, can choose whether the entire video image shall be used for exposure control or only an image area of alternatively 1%,3% or 10% of the entire image surface. Since the photographer chooses which image portion he wants to video, the control means stores only that image chosen by the photographer through the switching knobs 27b.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Iwasaki and Faltermeier et al and further in view of Arai et al (US 5,570,156).

Regarding claim 16, Mimura, Iwasaki and Faltermeier fail to disclose the claimed limitation wherein the screen is a monitor screen of an electronic viewfinder.

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However, Arai. et al disclose in Fig.3a camera utilizing detection of visual line comprising the claimed electronic viewfinder with a monitor screen which is met by the electronic viewfinder 101(col.4, lines 58-59) which inherently has a monitor screen for viewing video images of objects.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the camera of Mimura, as taught by Arai. et al, to include an electronic viewfinder, as an added feature, in order to monitor video images of objects, and thereby increase the exposure control range of the video camera of Mimura.

Conclusion

Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

Any response to this action should be mailed to:

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or faxed to:

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(703) 308-6306 and (703) 308-6296, (for formal communications intended for entry)

Or:

(703) 308-6306 and (703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be direct to the Group receptionist whose telephone is (703) 305-4700.

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